# Side to the South Carolina

# Infectious Waste Management Regulations R.61-105

### MAY 2000



This Document Contains Answers to the Most Commonly Asked Infectious Waste Questions, and a Copy of the Infectious Waste Management Regulations R.61-105



South Carolina Department of Health and Environmental Control

#### TABLE OF CONTENTS

Introduction
Important Information
Common Questions
Sharps
Regular Generators
Small Quantity Generators
Packaging
Labeling
Storage
Transportation
Treatment and Disposal

#### INTRODUCTION

This document is organized by subject in a question - answer format to aid the reader in understanding the South Carolina Infectious Waste Management Regulations R.61-105. The infectious waste regulations at the back of this document are frequently referred to and will aid the reader in fully understanding proper infectious waste management.

The most commonly asked questions are addressed in the "Common Questions" section.

#### IMPORTANT INFORMATION

#### THIS DOCUMENT IS NOT LEGAL ADVICE. READ THE ENTIRE DOCUMENT.

This guide is not intended as legal advice, but as an aid to understanding the South Carolina Infectious Waste Management Regulations, R.61-105, through a question-answer format. The infectious waste regulations cited in this document are subject to change.

Please read this entire document. Due to the complex nature of infectious waste regulations, failure to read this entire document may result in failure to comply with the regulations.

#### REGULATORY AUTHORITY

The South Carolina Infectious Waste Management Act, Act Number 134 of 1989, Chapter 93 of Title 44 of the 1976 Code of Laws, as amended, was passed by the South Carolina General Assembly to require the Department to promulgate comprehensive infectious waste management regulations.

#### PROGRAM DESCRIPTION

The infectious waste program is a comprehensive program which monitors compliance with the Infectious Waste Management Regulation, R.61-105. Initially, activities have concentrated on the registration of generators and transporters. The section is actively involved in permitting intermediate handling facilities and treatment facilities. Monitoring of commercial infectious waste transporters and treatment facilities is accomplished by inspectors knowledgeable in environmental regulations. Coordination of field inspectors and central office compliance and enforcement personnel round out the program. The funding for the program is obtained through the collection of fees.

#### **EFFECTIVE DATE**

The effective date of the Infectious Waste Management Regulation was May 26, 2000. Regulations are subject to change.

#### WHO ENFORCES THE REGULATIONS?

The South Carolina Department of Health and Environmental Control, Bureau of Land and Waste Management is responsible for monitoring compliance with the regulations.

#### JOINT AND SEVERAL LIABILITY

Infectious waste generators are responsible for the storage, collection and disposal of their infectious waste. Generators are responsible for ensuring that infectious waste is transported off site for treatment by a SCDHEC registered transporter and disposed of at a site or facility which has all applicable permits required to receive waste.

#### COMMONLY ASKED QUESTIONS BY INFECTIOUS WASTE GENERATORS

#### (1) WHAT IS INFECTIOUS WASTE?

Section E (1) "Infectious waste" means any waste items from research or the health care community which are included in these categories: Sharps, Microbiologicals, Blood and Blood Products, Pathological Waste, Isolation Waste and Contaminated Animal Waste.

The majority of waste produced at any medical facility is not classified as infectious waste. Materials such as office waste, paper from examination tables, unused needles, gauze, and band-aids may not be considered infectious waste and may be disposed of as regular solid waste.

#### (2) WHAT ARE SHARPS?

Section E (1)(a) "Sharps" means any discarded article that may compromise intact skin by causing punctures or cuts, including but not limited to: needles, syringes, pasteur pipettes, lancets, broken glass, and scalpel blades.

### (3) ARE PLASTIC SLIDES AND COVER SLIP INCLUDED IN THE DEFINITION OF A SHARP?

Section E (1)(a) Yes. The definition of a sharp does not differentiate between materials.

#### (4) WHAT IS MICROBIOLOGICAL WASTE?

Section E (1)(b) "Microbiological waste" means Specimens, cultures, and stocks of human pathogenic agents, including but not limited to: waste which has been exposed to human pathogens in the production of biologicals; discarded live and attenuated vaccines; and culture dishes/devices used to transfer, inoculate, and mix microbiological cultures.

#### (5) WHAT IS INCLUDED IN THE BLOOD CATEGORY?

Section E (1)(c) "Blood and body fluids" means all waste unabsorbed human blood,

or blood products, or absorbed blood when the absorbent is supersaturated, including but not limited to: serum, plasma and other components of blood, and visibly bloody body fluids such as suctioned fluids, excretions and secretions.

#### (6) WHAT IS PATHOLOGICAL WASTE?

Section E (1)(d) "Pathological waste" means All tissues, organs, limbs, products of conception, and other body parts removed from the whole body, excluding tissues which have been preserved with formaldehyde or other approved preserving agents, and the body fluids which may be infectious due to bloodborne pathogens. These body fluids are: cerebrospinal fluids, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, semen, and vaginal/cervical secretions.

#### (7) WHAT IS CONTAMINATED ANIMAL WASTE?

Section E (1)(e) "Contaminated Animal Waste" refers to animal carcasses, body parts and bedding of animals that have intentionally exposed to human pathogens in research or the production of biologicals.

#### (8) WHAT IS ISOLATION WASTE?

Section E (1)(f) "Isolation waste" refers to All waste generated from communicable disease isolation of the Biosafety Level 4 agents, highly communicable diseases, pursuant to the `Guidelines for Isolation Precautions in Hospitals', published by the Centers For Disease Control. The following is a list of the classification of Biosafety Level 4 agents:

#### CLASSIFICATION OF BIOSAFETY LEVEL 4 AGENTS:

- A) Smallpox, <u>Alastun</u>, Monkeypox, and Whitepox, when used for transmission or animal inoculation experiments;
- B) Hemorrhagic fever agents, including Crimean Hemorrhagic fever (Congo), Junin and Machupo viruses, and other as yet undefined;
- C) Lassa virus;
- D) Marburg virus;

- E) Tick-Oborne encephalitis virus complex, including Russian spring-summer encephalitis, Kyasanur forest diseases, Omak hemorragic fever and Central European encephalitis viruses;
- F) Venezuelan equine encephalitis virus, epidemic strains, when used for transmission or animal inoculation experiments; and
- H) Yellow fever virus-wild, when used for transmission or animal inoculation experiments.

### (9) HOW CAN I GET A COPY OF THE "GUIDELINES FOR ISOLATION PRECAUTIONS IN HOSPITALS"?

Call the National Technology Information Service in Springfield, VA at 1-800-553-6847 for a copy of the "Guidelines for Isolation Precautions in Hospitals". For other hospital publications call the Center for Disease Control in Atlanta, GA at 1-888-329-4232. Note that there is a charge on any publication you order.

#### (10) WHAT IS OTHER WASTE?

Section E (1)(g) "Other Waste" means any other material designated by written generator policy as infectious, or any other material designated by a generator as infectious by placing the material into a container labeled infectious.

#### (11) CAN I MIX SOLID WASTE WITH INFECTIOUS WASTE?

Section E (1)(g) No. Any solid waste which is mixed with infectious waste or solid waste placed in an infectious waste container must be managed as infectious waste.

#### (12) WHAT IS EXCLUDED FROM THE DEFINITION OF INFECTIOUS WASTE?

Section E (2) Hazardous waste, radioactive materials, infectious waste generated in a private residence, and etiologic agent or specimens being transported to a laboratory for testing are excluded from the definition of infectious waste.

### (13) IF A PATIENT PREFERS THAT A BODY PART BE BURIED RATHER THAN SENT OUT AS INFECTIOUS WASTE, IS THIS ALLOWED?

Section E (2)(f) Yes. Human corpses, remains, products of conception, and anatomical parts that are intended to be interred, cremated, or donated for medical research are excluded from the definition of infectious waste. Teeth which are returned to a patient.

### (14) IS THE DISPOSAL OF HUMAN FETUSES GOVERNED BY THE INFECTIOUS WASTE REGULATIONS?

Section E (1)(d) Yes. Under the definition of infectious waste, pathological waste is defined as including: all tissues, organs, limb, products of conception, and other body parts removed from the whole body and the body fluids to which Universal Precautions apply. These body fluids are: cerebrospinal fluids, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, semen, and vaginal/cervical secretions.

#### (15) ARE FEMININE HYGIENE PRODUCTS CONSIDERED INFECTIOUS WASTE?

Section E (2)(d) No, they are considered solid waste.

### (16) SHOULD BLOOD SAMPLES AND CULTURES SENT TO A LAB FOR ANALYSIS BE CONSIDERED INFECTIOUS WASTE IN MY REGISTRATION?

Section E (2)(e) No. These samples are not considered infectious wastes. Once the lab has tested the material, they will be included in the reference laboratory's infectious waste stream.

#### (17) ARE TEETH CONSIDERED INFECTIOUS WASTE?

Section E (2)(f) Yes. Teeth are consider to be a category of infectious waste (pathological waste) and should be placed into a sharps container. However, Teeth which are returned to a patient are exempt from regulatory control.

### (18) ARE DRESSINGS, BAND-AIDS, USED GLOVES CONSIDERED INFECTIOUS WASTE?

Section E (3) No. These items are only considered infectious waste if they are supersaturated with blood. Any material that contains blood which has been absorbed into that material so that it will not adhere to other surfaces upon contact can be disposed of as solid waste.

#### (19) SHOULD I.V. TUBING BE CONSIDERED INFECTIOUS WASTE?

Section E (3) Any tubing that contains blood is considered infectious waste. If there is no evidences of visible blood inside the tubing, then it is considered solid waste.

#### (20) WHAT IS SUPERSATURATED MATERIAL?

Section D (II) "Supersaturated material" means any material that contains enough fluid so that it freely drips that fluid or if lightly squeezed, fluid would drip from it. If a portion of a material is supersaturated with fluid, then the entire material must be considered supersaturated.

#### (21) ARE URINE AND FECES INCLUDED UNDER THE REGULATIONS?

Not usually. Urine and feces should be disposed of through the sanitary sewage or a septic tank, also the urine cups and stool sample kits can be double bacgged with plan black trash bags and can be disposed of as soild waste. Urine and feces are not suitable for landfilling.

#### (22) WHO OR WHAT IS AN INFECTIOUS WASTE GENERATOR?

An infectious waste generator is a person or facility producing infectious waste in a health care community, except for waste produced in a private residence.

#### (23) DO ALL GENERATORS HAVE TO REGISTER?

Section F (1) Yes. The South Carolina Infectious Waste Management Regulation R.61-105 requires that each site producing infectious waste must register with the Department. Registration forms with instructions are available through the website:

www.state.sc.us/dhec/eqc/lwm/html/infect.html or call the Infectious Waste Section.

### (24) SHOULD EACH DOCTOR IN A MULTI-PRACTICE OFFICE REGISTER SEPARATELY AS A GENERATOR?

Section F (1)(c) Multi-practice offices that store their infectious waste together should register as a single generator. To qualify as a small quantity generator, the practice must meet the fifty (50) pound limit cumulatively.

If each doctor in a practice chooses to register separately, their waste must be separated at the point of origin, stored separately, and be traceable to each doctor.

Small quantity generators sharing a common disposal system, such as a dumpster, are subject to joint and several liability. (Any generator contributing to the presence of infectious waste at a site, even a small fraction of the total material, is potentially liable for the total cost of cleaning up the entire site.)

(25) AT AN ACCIDENT SCENE, AN AMBULANCE CREW ADMINISTERS
EMERGENCY HEALTH CARE AND MUST TRANSPORT A SMALL AMOUNT OF
INFECTIOUS WASTE BACK TO THE HOSPITAL. WOULD THE AMBULANCE
NEED TO REGISTER AS AN INFECTIOUS WASTE GENERATOR?

Section F (1)(c) No. Since the waste is brought to the hospital or emergency center, the ambulance would not need to register. If the waste was brought back to the station for disposal, then the station would need to register as a generator.

#### (26) IF ANY CHANGES OCCUR WITH THE FACILITY, DO I NOTIFY SCDHEC?

Section F (2) Yes. When any changes occur in the previously submitted information such as name of the business, physical or mailing address, telephone number, the contact name of the infectious waste coordinator, the categories and amount of infectious waste generated, the generator must notified the Department in writing within thirty (30) days.

(27) WHAT ARE THE LEVELS OF RADIOACTIVE MATERIALS CAN GENERATORS SHIP OUT AS INFECTIOUS WASTE?

Section F (6)(d) Generators must prevent infectious waste containing radioactive material which is distinguishable from background from leaving the site of generation when the material is under the jurisdiction of the United States Nuclear Regulatory Commission or an Agreement State.

#### (28) CAN REGULAR GENERATORS TRANSPORT INFECTIOUS WASTE?

Section F (6)(h) No. Only small quantity generators may transport their own waste.

### (29) IF WE MOVE TO A NEW LOCATION OR CLOSE OUR DOORS, CAN WE LEAVE OUR INFECTIOUS WASTE BEHIND FOR SOMEONE ELSE TO CLEAN UP?

Section F (7) No. When a site of a waste generator relocates, closes or ceases to generate infectious waste, all infectious waste must be disposed of in accordance with the South Carolina Infectious Waste Management Regulation R.61-105.

#### (30) WHAT IS THE DEFINITION OF A SMALL QUANTITY GENERATOR?

Section G (1) In-state generators that produce less than fifty (50) pounds of infectious waste per calendar month are small quantity generators.

### (31) CAN SMALL QUANTITY GENERATORS THROW AWAY CULTURES AS OTHER NON-INFECTIOUS SOLID WASTE?

Section G (1)(b)(ii) No, all generators are required by our regulations to treat cultures. We recommend steam sterilization (autoclaving), although chemical disinfection may be appropriate.

### (32) WHAT SHOULD SMALL QUANTITY GENERATORS DO TO COMPLY WITH THE REGULATIONS ON DISPOSAL OF INFECTIOUS WASTE?

Section G (1)(b)(i),(2) & (3) Sharps should be stored and disposed of in rigid, leakresistant and puncture-resistant containers. Biological and safety equipment companies can provide containers that are especially suited for this purpose. Once they are packaged and labeled, they can be disposed of as other solid waste provided the disposal facility (landfill or incinerator) will accept infectious waste. Blood and cultures must be treated before disposal. Other categories of infectious waste can be disposed of as solid waste.

### (33) CAN SMALL QUANTITY GENERATORS DISPOSE OF UNTREATED WASTE AT THE LOCAL LANDFILL?

Section G (1)(b)(iii) Yes. Only small quantity generators may dispose of their untreated infectious waste at the local landfill provided that the landfill will accept the waste. For further information, please contact your local county landfill in your area.

### (34) CAN SMALL QUANTITY GENERATORS TRANSPORT WASTE TO A LOCAL HOSPITAL FOR INCINERATION?

Section G (2) Yes. Only small quantity generators can transport their own waste as long as they do not transport more than fifty (50) pounds at any one time, the waste is packaged and labeled as required in the regulations, and the waste is not transported in the passenger compartment of the vehicle.

# (35) IF I AM A SMALL QUANTITY GENERATOR AND CHOOSE TO HAVE A TREATMENT COMPANY DISPOSE OF MY INFECTIOUS WASTE, ARE THERE OTHER REQUIREMENTS THAT MUST BE MET?

Sections H through K and Sections M Yes. Infectious waste must be packaged in leak proof, semi-rigid containers that are impervious to moisture such as a red biohazard bag within a cardboard box. Sharps must be stored in leak-resistant, puncture-resistant containers. Reusable containers are acceptable but they must be disinfected immediately after use. Many waste treatment companies provide these containers to their clients, replacing them with disinfected containers during their scheduled pick-ups.

#### (36) CAN SHARPS CONTAINERS BE MADE OUT OF GLASS?

Section I (2) No. Glass is an unsuitable material for sharps containers due to the increased risk of injury glass poses.

### (37) IF I AM A SMALL QUANTITY GENERATOR, DO I HAVE TO TREAT THE SHARPS?

Section I (2) No. Generators shall place and maintain all sharps in a rigid, leakresistant, and puncture-resistant containers which are secured tightly to preclude loss of the content and which are designed for the safe containment of sharps.

#### (38) HOW THICK SHOULD A "RED BAG" BE?

Section I (6) The "South Carolina Infectious Waste Management Regulations R.61-105" states that plastic bags should have sufficient strength to prevent tearing.

### (39) SHOULD TREATED WASTE BE PACKAGED AND LABELED AS INFECTIOUS WASTE?

Section I (12) Exempt or excluded waste shall not be packaged as infectious waste. If the waste was once infectious, it shall bear a label clearly indicating that it is no longer infectious and an explanation why it is no longer infectious. Any waste packaged as being infectious is considered infectious waste.

### (40) HOW SHOULD THE CONTAINERS BE LABELED, IF THEY ARE SHIPPED OFF SITE FOR TREATMENT?

Section J (2) Containers of infectious waste being shipped off site for treatment must be labeled with the universal biohazard symbol as specified in 29 CFR 1910.1030 (g)(1)(i)(B) and (C) the word BIOHAZARD. You should also include the words INFECTIOUS WASTE or MEDICAL WASTE. All in-state generators must include their name or the Department issued generator number. Out-of-state generators must include their name, address, and telephone number. All labeling should be done with water-resistant, indelible ink. Leaking and crushed containers will be considered improperly packaged.

#### (41) SHOULD BAGS USED TO LINE A CONTAINER BE LABELED?

Section J (3) Yes. Bags used to line the inside of an outer container shall be labeled with the universal biohazard symbol sign and a labeling process which is water-resistant and indelible ink or imprinted.

# (42) CAN A GENERATOR USE ANY OTHER COLOR PLASTIC BAG (ie. BROWN OR BLACK) INSIDE A TRASH CAN THAT IS LABELED WITH THE UNIVERSAL BIOHAZARD SYMBOL?

OSHA states that "while the infectious waste is in the facility it must be placed in a red bag or the bag must be labeled with a BIOHAZARD label. Small quantity generators, at the time of disposal, the label may be removed or the employer can double bag (without a label) or the waste can be decontaminated."

#### (43) WHAT ABOUT OUTSIDE STORAGE?

Section K (2),(3) & (4) Outdoor storage areas must be locked, allow access to authorized personnel only and must be labeled with the universal biohazard symbol as specified in 29 CFR 1910.1030(g)(1)(i)(B) and (C) and the words Infectious Waste, Medical Waste or Biohazardous Waste.

#### (44) HOW LONG CAN GENERATORS STORE INFECTIOUS WASTE?

Section K (5) (a) Infectious waste must be maintained in a nonputrescent state using refrigeration when necessary. Generators can store infectious waste not exceed fourteen (14) days without refrigeration or thirty (30) days if maintained at or below 42 degrees Fahrenheit.

#### (45) CAN I USE ANY TYPE OF MANIFEST FORM?

Section M (1) No. A generator who transports, or offers for transport, infectious waste for offsite treatment, storage, or disposal, must prepare a manifest on a form approved by the Department and filled out in a legible manner according to the instructions for that form. The manifest form must accompany the waste at all times after leaving the generator's facility. Registered transporters will provide a manifest form when picking up the waste.

### (46) IF I DON'T GET MY CERTIFICATE OF DESTRUCTION BACK, WHAT SHOULD I DO?

Section M (5) The generator shall notify the Department in writing if he does not receive a completed manifest appropriately signed from the destination facility within fifty (50) days after offering for transport. Call the Infectious Waste Section

for assistance.

### (47) CAN I USE ANY TRANSPORTER OR MANAGEMENT COMPANY TO DISPOSE OF MY INFECTIOUS WASTE?

Section N (1) Yes, as long as the Infectious Waste transporters or management companies are registered with the Infectious Waste Section, South Carolina Department Health and Environmental Control.

### (48) ARE GENERATORS RESPONSIBLE FOR THEIR WASTE ONCE A REGISTERED TRANSPORTER HAS PICKED UP THEIR WASTE?

Yes. Generators are responsible for their waste from cradle to grave.

### (49) CAN UNTREATED INFECTIOUS WASTE FROM REGULAR GENERATORS BE DISPOSED OF AT THE LOCAL LANDFILL?

Section T (1) No. Only treated infectious waste can be disposed of at the local landfill. Once infectious waste is appropriately treated, it should be considered solid waste, which is then suitable for landfill disposal.

### (50) WHAT ARE SOME OF THE CURRENT TREATMENT TECHNIQUES FOR INFECTIOUS WASTE?

- \* Chemical Disinfection (Hydrogen Peroxide)
- \* Chemical Waste Encapsulation
- \* Electron Beam Irradiation Sterilization
- \* Electropyrolysis
- \* Gas/Vapor Sterilization (Ethylene Oxide)
- \* Incineration
- \* Laser Treatment
- \* Mechanical/Chemical Disinfection

- \* Microwave Disinfection
- \* Plasma Pyrolysis
- \* Steam Sterilization
- \* Thermal Inactivation or Dry Heat Sterilization

### (51) CAN THE LOCAL LANDFILL REJECT PROPERLY PACKAGED SHARPS OR INFECTIOUS WASTE THAT HAVE BEEN TREATED?

Landfill operators have the right to reject any waste for disposal in the landfill, even if Federal and local State regulations allow landfill disposal of such waste.

#### (52) HOW CAN I DISPOSE OF BLOOD AND BODY FLUIDS?

Section T (5)(a) Blood and body fluids may be discharged directly into a Department-approved wastewater treatment disposal system.

#### (53) WHAT ABOUT INFECTIOUS WASTE SPILLS?

Spills of infectious waste must be cleaned up immediately. Spills which effect the environment, workers and/or the general public health must be reported immediately to the South Carolina Department of Health and Environmental Control through the 24-hour emergency telephone number, (803) 253-6488.

#### (54) HOW LONG DO I MAINTAIN RECORDS?

Section AA (1) All generators, transporters, transfer facilities, intermediate handling facilities and treatment facilities handling infectious waste generated, treated, transported, or otherwise managed in South Carolina shall maintain all records and manifest copies required by the infectious waste regulation for a minimum of three (3) years.

(55) WHAT CAN I DO IF THE REGULATION CAUSES UNUSUAL FINANCIAL HARDSHIP FOR MY FACILITY OR SAFETY CONCERNS FOR MY EMPLOYEES?

Section CC (1) You may request a variance from that portion of the regulations. A variance is a written petition from any person who is subject to this regulation. The Department may grant a variance from one or more specific provisions of the infectious waste regulations.

### (56) IF I HAVE ANY QUESTIONS ABOUT THE BLOODBORNE PATHOGENS REGULATIONS, WHO DO I CONTACT?

Call the South Carolina Department of Labor at (803) 896-4300 or write to:South Carolina Department of Labor, P.O. Box 11329; Columbia, SC 29211-1329 Attn: Bloodborne Pathogens Section.

(57) IF I HAVE ANY OTHER QUESTIONS ABOUT THE SOUTH CAROLINA INFECTIOUS WASTE MANAGEMENT REGULATIONS R.61-105, WHO DO I CONTACT?

You can call the South Carolina Department of Health and Environmental Control at (803) 896-4000 and ask for anyone in the Infectious Waste Section.

If you need a copy of the Infectious Waste Regulations R.61-105, call us or you can download it from our website at: www.state.sc.us/dhec/eqc/lwm/html/infect.html.